

# Exhibit 4

Transcript of the Testimony of  
VALERIE J. HARWOOD, Ph.D.

1/29/2008

W. A. DREW EDMONDSON, et al.

vs.

TYSON FOODS, INC., et al.

4:05-CV-00329-TCK-SAJ

TULSA FREELANCE REPORTERS  
610 S. Main St., Ste. 210  
Tulsa, OK 74103  
Phone: (918) 587-2878  
Fax: (918) 587-2879

**EDMONDSON vs. TYSON, et al.**  
**VALERIE J. HARWOOD**

**4:05-CV-00329**  
**1/29/08**

1

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

IN THE UNITED STATES DISTRICT COURT FOR THE  
NORTHERN DISTRICT OF OKLAHOMA

W. A. DREW EDMONDSON, in his )  
capacity as ATTORNEY GENERAL )  
OF THE STATE OF OKLAHOMA and )  
OKLAHOMA SECRETARY OF THE )  
ENVIRONMENT C. MILES TOLBERT, )  
in his capacity as the )  
TRUSTEE FOR NATURAL RESOURCES )  
FOR THE STATE OF OKLAHOMA, )

Plaintiffs, )

vs. )

4:05-CV-00329-TCK-SAJ

TYSON FOODS, INC., et al, )

Defendants. )

- - - - -  
THE VIDEOTAPED DEPOSITION OF  
VALERIE J. HARWOOD, Ph.D., produced as a witness  
on behalf of the Defendants in the above styled and  
numbered cause, taken on the 29th day of January,  
2008, in the City of Tulsa, County of Tulsa, State  
of Oklahoma, before me, Bonnie Glidewell, a  
Certified Shorthand Reporter, duly certified under  
and by virtue of the laws of the State of Oklahoma.

**EDMONDSON vs. TYSON, et al.**  
**VALERIE J. HARWOOD**

**4:05-CV-00329**  
**1/29/08**

2

**A P P E A R A N C E S**

FOR THE PLAINTIFFS: Mr. David Page  
Attorney at Law  
502 West 6th Street  
Tulsa, OK 74119  
-and-  
Mr. Louis Bullock  
Attorney at Law  
110 West 7th St. Suite 707  
Tulsa, OK 74119

FOR TYSON FOODS: Mr. Jay Jorgenson  
Mr. Gordon Todd  
Attorneys at Law  
1501 K Street, N.W.  
Washington, D.C. 20005

FOR CARGILL: Mr. John Tucker  
Attorney at Law  
100 West 5th Street  
Suite 400  
Tulsa, OK 74103

FOR SIMMONS FOODS: Mr. John Elrod  
Attorney at Law  
211 East Dickson Street  
Fayetteville, AR 72701

FOR PETERSON FARMS: Ms. Nicole Longwell  
Attorney at Law  
320 South Boston  
Suite 700  
Tulsa, OK 74103

FOR GEORGE'S: Mr. Woody Bassett, III  
Attorney at Law  
221 North College  
Fayetteville, AR 72701

**EDMONDSON vs. TYSON, et al.**  
**VALERIE J. HARWOOD**

**4:05-CV-00329**  
**1/29/08**

3

1 FOR WILLOW BROOK: Ms. Jennifer Griffin  
2 Attorney at Law  
3 314 East High Street  
4 Jefferson City, MO 65109  
(Via phone)

5 FOR CAL-MAINE: Mr. Robert Sanders  
6 Attorney at Law  
7 2000 AmSouth Plaza  
8 P. O. Box 23059  
9 Jackson, MS 39225  
10 -and-  
11 Mr. Robert Reddeman  
12 Attorney at Law  
13 1437 South Boulder  
14 Tulsa, OK 74119  
15

16 ALSO APPEARING: Mr. Samuel Myoda  
17  
18  
19  
20  
21  
22  
23  
24  
25

**Tulsa Freelance Reporters**

**(918) 587-2878**

**EDMONDSON vs. TYSON, et al.**  
**VALERIE J. HARWOOD**

**4:05-CV-00329**  
**1/29/08**

30

1       this case, any person at all, that you give  
2       directions to, that you tell what to do?

3       **A**       I give suggestions for analysis to Roger  
4       Olsen, for example, microbial analysis.

5 Q Okay, and that's more of a collegial 08:32AM  
6 relationship?

7 | **A** That's your terminology.

8 Q How do you define your relationship with Roger  
9 Olsen?

10       **A**             I would say, yes, we are colleagues, but that                               08:32AM  
11             at times I do direct what decisions are made in  
12             terms of the analysis in my area of expertise.

13 Q Okay. And I think I can help you out here.  
14 What I'm trying to figure out what to ask you about,  
15 what not to ask you about. And if you direct the 08:32AM  
16 hydrogeology in the case, then we'll send a lot of  
17 time on the hydrogeology; if you don't, we won't.

18       **A**       I do not direct the hydrogeology in the case.  
19       Anything that I have any influence over in terms of  
20       where we go is the microbial water quality testing. 08:32AM

21 Q SO to the extent there is microbial water  
22 testing going on, are you in charge? Do you direct  
23 what is done?

24 MR. PAGE: Object to the form.

25	THE WITNESS: A lot of water quality	08:32AM
----	-------------------------------------	---------

## Tulsa Freelance Reporters

**(918) 587-2878**

**EDMONDSON vs. TYSON, et al.**  
**VALERIE J. HARWOOD**

**4:05-CV-00329**  
**1/29/08**

31

1 testing was actually completed and/or planned before  
2 I came on the case and so I did not direct all of  
3 the -- nearly all of the planning of the  
4 microbiological testing.

5 Q (By Mr. Jorgenson) Okay. 08:33AM

6 A The --

7 Q I'm sorry, I didn't mean to interrupt you. Go  
8 ahead?

9 A That's all right.

10 Q So when you came on to the case and a lot of 08:33AM  
11 testing had already been done, by whom had it been  
12 done?

13 A The laboratories that we had mentioned: EML,  
14 FoodProtech and the mystery laboratory.

15 Q Okay, and if you remember the mystery 08:33AM  
16 laboratory's name, let us know.

17 A (Nodding head up and down.)

18 Q All right, let me return to the documents you  
19 provided. Did you make my handwritten notes in the  
20 course of working on this case? 08:33AM

21 A I don't remember doing that. I don't make a  
22 lot of handwritten notes.

23 Q Do you send a lot of e-mail in the case?

24 A Yes.

25 Q Okay. I have -- did you preserve the e-mail 08:34AM

**EDMONDSON vs. TYSON, et al.**  
**VALERIE J. HARWOOD**

**4:05-CV-00329**  
**1/29/08**

197

1 the data on which you were relying on was secured  
2 using appropriate standards we discussed earlier?

3 **A** I asked for a list of the methods utilized by  
4 the laboratories and I talked to the laboratory  
5 managers and I viewed the data. 01:15PM

6 **Q** Do you still have that list of methods  
7 utilized?

8 **A** Yes.

9 **Q** Did you provide it to the State's lawyers?

10 **A** Yes. 01:15PM

11 **Q** Could you provide it to them again if they  
12 didn't give it to us?

13 **A** Yes.

14 **Q** Did you contribute in any way to the  
15 development of the State's standard operating 01:15PM  
16 procedures for the collection of samples?

17 **A** Minimally. I recall being asked to talk about  
18 the composting of field samples, of soil samples and  
19 poultry litter samples and, also, about the  
20 collection of high flow samples. 01:16PM

21 **Q** Okay. So was the sampling structure set up by  
22 others?

23 **A** Generally, yes.

24 **Q** Who?

25 **A** CDM and Roger Olsen's team. 01:16PM

**Tulsa Freelance Reporters**

**(918) 587-2878**



**EDMONDSON vs. TYSON, et al.**  
**VALERIE J. HARWOOD**

**4:05-CV-00329**  
**1/29/08**

240

1       been convincingly demonstrated yet."

2       **Q**       Thank you, that's good. Let me have you read  
3       several, then we can talk about them. You know  
4       what? I think that's it -- I mean the rest are  
5       here, they are already written for what they are.

02:10PM

6       Do you still think that's true?

7       **A**       This was written to talk about the  
8       library-dependent methods, and so, yes, it's  
9       certainly true about the library-dependent methods.

10      **Q**       And do you believe that library-independent  
11      methods are different?

02:10PM

12      **A**       I believe that with the proper controls and  
13      application of the correct methods for various host  
14      sources, you could get at a pretty good estimate of  
15      the quantitative loading.

02:10PM

16      **Q**       And what would the error rate be in that  
17      pretty good estimate?

18      **A**       I'm going to say I wouldn't accept an error  
19      rate bigger than 25 percent.

20      **Q**       And how would you know that was the error  
21      rate? Error rates are -- let me state a different  
22      question. Is it true that error rates are typically  
23      established through a procedure?

02:10PM

24      **A**       Yeah. So, generally, if you were trying to do  
25      the contribution, trying to assess whether you could

02:11PM

**EDMONDSON vs. TYSON, et al.  
VALERIE J. HARWOOD****4:05-CV-00329  
1/29/08****241**

1 correctly determine the contribution of organisms of  
2 various sources to contamination in a sample, you  
3 would put -- you would mix varying quantities of  
4 these organisms for which you had microbial source  
5 tracking tests, you would mix these species together 02:11PM  
6 in a certain proportion that you knew and then you  
7 try to determine, based on your assay, the  
8 quantitative proportions of the bacteria in the  
9 sample.

10 Q And that could produce, in the 02:11PM  
11 library-independent methods, an error rate of up to  
12 25 percent?

13 A No, I was saying -- it hasn't been done.

14 Q Oh, it hasn't been done?

15 A No. 02:11PM

16 Q Okay. It could be done?

17 A No -- well, but well, we don't, that's  
18 something that's like pushing right at the forefront  
19 of what we know how to do.

20 Q Okay, I understand. We have reached the 02:11PM  
21 two-minute warning flag, so let's switch tapes.

22 MR. WIETHOLTER: We are off the record.

23 The time is 2:13 p.m.

24 (Following a short recess at 2:13 p.m.,  
25 proceedings continued on the Record at 2:23 p.m.) 02:21PM